

REMARKS

This responds to the Office Action of July 31, 2009.

Claims 4-6, 9-10, and 14 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Sarin et al. (US 20040254586) in view of DiGioia et al. (US 6205411) and Chen et al. (WO 02/062248).

In the Office Action, it is argued that Sarin defines a coordinate system of the pelvis "in the near AP direction"; determines transaxial displacement of landmarks on an "image"; and calculates the axial and transaxial rotations of the pelvis from the displacement. (See Office Action, ¶page 3). There is no such teaching in Sarin.

To begin with, Sarin eschews the use of images. See Sarin, [0008]. Thus, there is no discussion of the AP direction or AP imaging, nor is there discussion of determining the displacement of landmarks in the [non-existent] image. What Sarin does teach is affixing a frame called a "touchplate" to landmarks on the pelvis (see Sarin, Fig. 4, touchplate 250, and [0036]) to define the anterior pelvic plane (see Sarin, [0042]) and then using a locating system to acquire the position of the touch points on the touch plate (see Sarin, [0048]). Thus, Sarin teaches *none* of the steps of, e.g., "receiving a fluoroscopic image of said pelvis in the near AP direction"; "defining first and second landmarks of said pelvis on said image"; determining the transaxial displacement of said landmarks on said image"; or "using said displacement to determine the axial [or transaxial] rotation of said pelvis" as prescribed in independent claims 4 and 9.

Similarly, it is argued that DiGioia (US 6,205,411) teaches superimposing landmark registration onto a fluoroscopic image, wherein rotation is taken as a function of displacement of the fluoroscopic images", citing DiGioia, col. 11, l. 11-25. The cited

discussion neither mentions fluoroscopic imaging nor describes determining axial and transaxial rotations from such an image. Rather, it merely describes attaching a pelvic tracking target to the patient and using positional data as input to navigational guidance software.

Chen was not specifically applied and will be dealt with below.

Claims 7-8 and 12-13 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Sarin et al. (US 20040254586) in view of DiGioia et al. (US 6205411) and Chen et al. (WO 02/062248). It is suggested by the Examiner that Chen teaches finding the distance between the pubic symphysis and the right and left teardrops and thus it would have been obvious to use this distance as a normalizing factor. However, there is such suggestion of normalization of anything in Chen. Not is there any suggestion of any such measurement or normalization in either Sarin, or DiGioia, and thus the combination of these with Chen adds nothing.

For the foregoing reasons, the claims presently presented are patentably distinguishable over the references and should be allowed.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

/Martin J. O'Donnell/
Martin J. O'Donnell
Reg. No. 24,204
CESARI AND MCKENNA, LLP
88 BLACK FALCON AVENUE
BOSTON, MA 02210
Telephone: (617) 951-2500
Facsimile: (617) 951-3927